Resurgence and Transseries in Quantum, Gauge and String Theories

CERN THEORY INSTITUTE 2014 — SCHEDULE

TIME	MON	TUE	WED	THU	FRI
9h30	**ZINN-JUSTIN**	**ÉCALLE**	**BENEKE**	**DOREY**	**ANICETO**
10h30	BREAK	BREAK	BREAK	BREAK	BREAK
11h00	**JENTSCHURA**	**COSTIN**	**PINEDA**	**DELABAERE**	**ARGYRES**
12h00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
14h00	**VOROS**	**GUALTIERI**	**BERRY**	**MARIÑO**	**SCORZATO**
15h00	BREAK	BREAK	BREAK	BREAK	BREAK
15h30	**DUNNE**	**SAUZIN**	**HOWLS**	**COUSO**	**SHIFMAN**
16h30	BREAK				
17h00	**BENDER**				
18h00			RECEPTION		

Aniceto: *"Resurgence in Localizable Supersymmetric Gauge Theories"*
Argyres: *"Effective Actions of 4d Gauge Theories on $\mathbb{R}^3 \times \mathbb{S}^1$ with Periodic Fermions"*
Bender: *"Nonlinear Eigenvalue Problems and PT-Symmetric Quantum Mechanics"*
Beneke: *"The OPE as a Transseries: The $O(N)$ Sigma-Model at Order $1/N$"*
Berry: *"Divergent Series: From Thomas Bayes's Bewilderment to Today's Resurgence via the Rainbow"* **(Theory Colloquium)**
Costin: *"Resurgence, Generalized Borel Summability and Applications to Ionization Problems"*
Couso-Santamaría: *"Resurgent Transseries in Topological String Theory"*
Delabaere: *"Resurgent Methods and the First Painlevé Equation"*
Dorey: *"The Basics of the ODE/IM Correspondence"*
Dunne: *"Resurgence in Quantum Field Theory and Quantum Mechanics"*
Écalle: *Resurgence and the Protean Bridge Equation: Taking Stock and Looking Ahead"*
Gualtieri: *"Stokes Groupoids: A Geometric Approach to Resummation"*
Howls: *"Sum-ware over the Rainbow: Hyper, Higher and Transseries Asymptotics"*
Jentschura: *"Resurgence as a Generalization of Perturbation Theory"*
Mariño: *"Resurgence, String Theory, and the $1/N$ Expansion"*
Pineda: *"Phenomenology of Renormalons from Heavy Quark Physics and Lattice"*
Sauzin: *"Two Classical Examples of Resurgence"*
Scorzato: *"The Sign Problem in Lattice Field Theories and the Lefschetz Thimble"*
Shifman: *"On Renormalons in Supersymmetric Field Theories"*
Voros: *"Exact WKB Resolution of a General $1D$ Schrödinger Equation"*
Zinn-Justin: *"From Instanton Expansions to Exact Results"*